

CLAIMS

[1] A display screen management unit of switching and displaying a plurality of screens on a display by screen transition, comprising:

5 a saving section of saving screen information about the plurality of screens;

an instruction section of providing an instruction to switch a currently displayed screen in response to an external request;

10 a screen control section of controlling a display on the display in accordance with the instruction from the instruction section; and

a screen discard determination section of comparing the currently displayed screen with a switching target screen indicated
15 by the instruction section based on the screen information saved in the saving section, to determine whether or not the currently displayed screen is discarded,

wherein, when the screen discard determination section determines that the currently displayed screen is discarded, the
20 screen control section discards information about the currently displayed screen from the saving section.

[2] The display screen management unit according to claim 1, wherein the saving section includes a screen resource saving
25 section of saving a screen resource for a screen to be displayed

on the display, and

when instructed to switch screens from the instruction section, the screen control section generates a screen resource for the switching target screen, and saves the generated screen resource into the screen resource saving section, and requests
5 the screen discard determination section to determine whether or not the currently displayed screen is discarded.

[3] The display screen management unit according to claim
10 2, wherein, when the screen discard determination section determines that the currently displayed screen is discarded, the screen control section discards a screen resource for the screen determined to be discarded, from the screen resource saving section.

[4] The display screen management unit according to claim
1, wherein the saving section includes:

an initial screen information saving section of saving
initial screen information which prescribes initial screen
20 information; and

a screen information saving section of saving the
currently displayed screen information and the switching target
screen information,

when providing an instruction to switch the currently
25 displayed screen, the instruction section reads out initial screen

information about the switching target screen from the initial screen information saving section, and notifies the screen control section of the read initial screen information, and

the screen control section saves the notified initial
5 screen information as the switching target screen information into the screen information saving section.

[5] The display screen management unit according to claim 4, wherein, when the screen discard determination section
10 determines that the currently displayed screen is discarded, the screen control section discards screen information about the screen determined to be discarded, from the screen information saving section.

15 [6] The display screen management unit according to claim 1, wherein, when the whole or a part of the currently displayed screen is displayed simultaneously with the switching target screen, the screen discard determination section determines that the
20 currently displayed screen is not discarded, and when the currently displayed screen is completely hidden by the switching target screen, the screen discard determination section determines that the currently displayed screen is discarded.

[7] The display screen management unit according to claim
25 6, wherein the screen information includes information indicating

a screen size, and

the screen discard determination section uses the screen size indicating information included in the screen information to determine whether or not the currently displayed screen is discarded.

[8] The display screen management unit according to claim 6, wherein the screen information includes information indicating a screen position, and

10 the screen discard determination section uses the screen position indicating information included in the screen information to determine whether or not the currently displayed screen is discarded.

15 [9] The display screen management unit according to claim 6, wherein the screen information includes residence information indicating whether a screen is resident or non-resident, and

when it is determined based on the residence information included in the screen information that the currently displayed screen is resident, the screen discard determination section determines that the currently displayed screen is not discarded.

[10] The display screen management unit according to claim 6, wherein the screen information includes a display time from 25 when a screen is displayed to when the screen goes to a non-displayed

state, and

when it is determined based on the display time that the switching target screen display time is shorter than a predetermined time, the screen discard determination section
5 determines that the currently displayed screen is not discarded.

[11] The display screen management unit according to claim 6, wherein the screen information includes mask information about a screen, and

10 the screen discard determination section uses the mask information included in the screen information to determine whether or not the currently displayed screen is discarded.

[12] The display screen management unit according to claim 15 4, further comprising:

a registration section of registering initial screen information saved in the initial screen information saving section via the screen control section into the screen information saving section,

20 wherein the registration section notifies the screen control section of all initial screen information saved in the initial screen information saving section, and

the screen control section saves the initial screen information notified of by the registration section as the screen
25 information into the screen information saving section.

[13] The display screen management unit according to claim 12, further comprising:

 a communications section of obtaining application data
5 including screen information via an external network; and

 a screen information extraction section of extracting the screen information from the application data obtained by the communications section,

 wherein the registration section notifies the screen
10 control section of the screen information extracted by the screen information extraction section, and

 the screen control section saves the notified screen information into the screen information saving section.

15 [14] A display screen management method of switching and displaying a plurality of screens on a display by screen transition, comprising the steps of:

 providing an instruction to switch a currently displayed screen in response to an external request;

20 controlling a display on the display in accordance with the instruction from the instruction step;

 determining whether or not the currently displayed screen is discarded, by comparing the currently displayed screen with the indicated switching target screen based on previously
25 saved screen information; and

discarding information about the currently displayed screen when the determining step determines that the currently displayed screen is discarded.

5 [15] The display screen management method according to claim 14, wherein, in the step of discarding the information about the currently displayed screen, a screen resource for a screen determined in the determining step to be discarded, is discarded.

10 [16] The display screen management method according to claim 14, wherein, in the step of determining whether or not the currently displayed screen is discarded, when the whole or a part of the currently displayed screen is displayed simultaneously with the switching target screen, it is determined that the currently
15 displayed screen is not discarded, and when the currently displayed screen is completely hidden by the switching target screen, it is determined that the currently displayed screen is discarded.

[17] A program which is executed by a display screen
20 management device of switching and displaying a plurality of screens on a display by screen transition, the program causing the device to execute the steps of:

 providing an instruction to switch a currently displayed screen in response to an external request;

25 controlling a display on the display in accordance with

the instruction from the instruction step;

determining whether or not the currently displayed screen is discarded, by comparing the currently displayed screen with the indicated switching target screen based on previously

5 saved screen information; and

discarding information about the currently displayed screen when the determining step determines that the currently displayed screen is discarded.